

CLAIMS

1. A device for repairing a moving handrail of a passenger conveyor, for repairing a moving handrail having a surface portion made of a thermoplastic material, comprising heating means for melting the surface portion through heating.

2. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, wherein the heating means has a mold bonded to an upper surface of the surface portion on an onward side of a path of the moving handrail, and an electric heater for heating the mold.

3. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, further comprising fixing means having a magnet portion magnetically adsorbed on a railing supporting the moving handrail, for fixing the heating means to the railing.

4. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, further comprising cooling means for cooling the surface portion that has been melted through heating by the heating means.

5. The device for repairing a moving handrail of a passenger

conveyor according to Claim 1, further comprising grinding means for grinding down the surface portion before the surface portion is heated by the heating means.

6. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, further comprising a spacer abutting on the surface portion, for maintaining a predetermined gap between the heating means and the surface portion.

7. The device for repairing a moving handrail of a passenger conveyor according to Claim 6, wherein the spacer is a spacer roller for rolling with respect to the surface portion.

8. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, wherein the heating means is a heating roller for heating the surface portion while rolling with respect to the surface portion.

9. The device for repairing a moving handrail of a passenger conveyor according to Claim 1, further comprising: drive means for moving the heating means in a longitudinal direction of the moving handrail.

10. A method of repairing a moving handrail of a passenger

conveyor, the moving handrail having a surface portion made of a thermoplastic material, comprising the steps of:

melting a target spot to be repaired of the surface portion through heating; and

curing the target spot again.

11. The method of repairing a moving handrail of a passenger conveyor according to Claim 10, wherein the target spot is heated at a temperature of 180°C to 200°C.

12. The method of repairing a moving handrail of a passenger conveyor according to Claim 10, wherein the target spot is melted through heating after having been moved to a linear portion of a path of the moving handrail.

13. The method of repairing a moving handrail of a passenger conveyor according to Claim 10, further comprising the step of removing dirt on the target spot before melting the target spot through heating.

14. The method of repairing a moving handrail of a passenger conveyor according to Claim 10, wherein the moving handrail is caused to run while the surface portion is heated so that a heated spot of the surface portion is moved in a longitudinal direction of the

moving handrail.

15. The method of repairing a moving handrail of a passenger conveyor according to Claim 14, wherein the moving handrail is caused to run at a running speed lower than a running speed during normal operation.